- 11. Soluble branched polymers of glucose according to Claim 10, having a viscosity determined according to a test B of at most 5,000 cP.
- 12. Branched polymers of glucose according to Claim 10, having:
 - between 2.5 and 5% of α -1,6 glucosidic bonds,
 - a Mw determined according to a test C at a median value of the molecular weight distribution profile lying between 10^5 and 10^6 daltons,
 - a reducing sugar content of at most 1%.
- 13. Branched polymers of glucose according to Claim 10, having:
 - between 5 and 10% of α -1,6 glucosidic bonds,
 - a Mw determined according to a test C at a median value of the molecular weight distribution profile lying between 10^7 and 10^8 daltons, and
 - a reducing sugar content of at most 1%.
- 14. Process for manufacture of branched polymers of glucose essentially containing no β -glucosidic bonds according to Claim 10, wherein:
 - a) an aqueous solution of starch or of starch derivative of dry matter of at least 1% by weight, preferably 1 to 50% by weight, is subjected to a temperature greater than 130°C, preferably lying between 140 and 150°C, under a pressure of more than 3.5 bars, preferably lying between 4 and 5 bars, for at least 2 mins, preferably for 2 to 5 mins,
 - b) the starch or starch derivative thus obtained is treated with 50 to 2,000 units of purified branching enzyme at a

- temperature lying between 25 and 50°C, preferably at a temperature of 30°C, for a duration from 10 mins to 24 hrs, and
- c) the branched polymers of glucose thus obtained are collected.
- 15. Process for manufacture of soluble branched polymers of glucose according to Claim 14, wherein the branching enzyme is selected from the group consisting of glycogen branching enzymes, starch branching enzymes and any mixtures of these enzymes.
- 16. Process for manufacture of soluble branched polymers of glucose according to Claim 14, wherein the branching enzyme is extracted from organisms and/or from microorganisms selected from the group consisting of higher plants, yeasts, bacteria and unicellular algae, and is preferably extracted from unicellular algae.
- 17. Process for manufacture of soluble branched polymers of glucose according to Claim 16, wherein the branching enzyme extracted from algae is obtained by isolation from a genetically modified organism capable of expressing the said enzyme.
- 18. Compositions intended for use in industries, especially Paper-Cardboard, Textiles, Pharmaceuticals, Cosmetics and in particular Food, containing branched polymers of glucose according to Claim 10 or capable of being obtained according to Claim 14.

Respectfully submitted,

Jean-Jacques CABOCHE, et al.

10-22-01

Date

Richard L. Fix Reg. No. 28,297

HENDERSON & STURM LLP 206 Sixth Avenue Suite 1213 Des Moines, Iowa 50309-4076

Telephone: 515-288-9589 Telefax: 515-288-4860

BEST AVAILABLE COPY